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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,429	09/02/2004	Tsutomu Furuzono	1035-526	1242

23117 7590 11/15/2006

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ARLINGTON, VA 22203

EXAMINER
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PENG, KUO LIANG

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/506,429

Applicant(s)

FURUZONO ET AL

Examiner

Kuo-Liang Peng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/21/06 Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/21/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The Applicants' amendment filed on August 21, 2006 is acknowledged.

Claims 1-3, 5, 9 and 11 are amended. Claim 18 is added. Now, Claims 1-18 are pending.

2. Claim rejection(s) under 35 USC 102 and 103 in paragraphs 3-5 and 7-8 of the previous Office Action (Paper No. 052706) is/are removed.

3. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In Claims 10 (line 4) and 12 (line 5), it is not clear as to what “a molecular chain” refers to.

***Claim Rejections - 35 USC § 102***

6. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuzono (New development trend of intelligent material/technology -- Chapter5: Percutaneous device).

Furuzono discloses a precutaneous trans-catheter, artificial organ, etc. described in paragraph 9 of Paper No. 052706, which is incorporated herein by reference.

For Applicants' argument (Remarks, page 9, last paragraph to page 10, 2<sup>nd</sup> paragraph), it is noted that Examiner is not able to find the cover sheet in Japanese and the English translation thereof to confirm the publication date of Furuzono.

7. Claims 1-12 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuzono130 (Development of Bio-interface Consisting of Nano-Scaled Hydroxyapatite and Polymer Fibers via Covalent Linkage for Implant Materials. P.130).

Furuzono130 discloses a manufacturing method of a hydroxyapatite complex as a medical material, which reads on the method of the claimed invention. (page 130)

For Applicants' argument (Remarks, page 10, last paragraph), Examiner is still not able to find the publication date of the lined-through reference "Furuzono et al. 22C-15-L3 Development of Bio-interface Consisting of Nano-Scaled Hydroxyapatite and Polymer Fibers via Covalent Linkage for Implant Materials. P.130" cited in the information disclosure statement filed on September 2, 2004.

***Claim Rejections - 35 USC § 103***

8. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP511 (JP 2001-172511) in view of Furuzono130.

JP511 discloses a percutaneous trans-catheter, a percutaneous terminal, an artificial blood vessel or an artificial organ prepared by a **hydroxyapatite complex**-based medical material. ([0011]-[0013], [0016], [0023], [0037], [0043] and [0047]) JP511 is silent on the specific use of the specific claimed hydroxyapatite complex-based medical material. However, Furuzono130 discloses a **hydroxyapatite complex**-based medical material, supra, which is incorporated herein by reference. Since both JP511 and Furuzono130 utilize hydroxyapatite

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complex-based medical materials, it would have been obvious to one of ordinary skilled in the art at the time of the invention was made to utilize Furuzono130's medical material for making JP511's medical articles with expected success. Especially, Furuzono130 is in the same field as that of JP511's endeavor.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

November 7, 2006

  
Kuo-Liang Peng  
Primary Examiner  
Art Unit 1712